

REMARKS

Claims 1-27 are pending. Claims 20-27 are added. Claims 1-17 and 19 are amended. No new matter is added as a result of the claim amendments.

Interview with Examiner

On February 6, 2008, Yue Li (Agent for Applicants) and Examiner Parries participated in an interview to discuss proposed amendments to claims 1 and 4.

Objections

Claim 19 is objected to because of the informalities. Applicants have amended the claim 19, rendering the objection moot at this point.

103 Rejections

Claims 1-8 and 10-19

According to the instant Office Action, claims 1-8 and 10-19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carobolante (US Patent No. 6,084,378) in view of Alfrey (US Patent Application Publication No. 2003/103364), and further in view of Gay (US Patent No. 6,791,390). Applicants have reviewed the Carobolante, Alfrey and Gay references, and respectfully submit that the embodiments of the present invention set forth in claims 1-8 and 10-19 are neither anticipated nor rendered obvious by Carobolante in view of Alfrey, and further in view of Gay.

A shortcoming of this combination is that Carobolante and Alfrey, alone or in combination, do not teach or suggest each of the limitations of independent claims 1, 4, and 11, and Gay fails to teach or suggest a modification of Carobolante and Alfrey that would remedy the deficiencies of Carobolante and Alfrey.

Among other reasons, Applicants respectfully submit that Carobolante in view of Alfrey, and further in view of Gay, does not teach or suggest a differential load driving circuit including “a controller for controlling said plurality of power switch driving circuits and said at least one current source switch, and for either selecting said PWM powering mode in which said PWM signal controls said at least one power switch or selecting said linear powering mode in which said first current source supplies current to said load, and for controlling a switchover point between said PWM powering mode and said linear powering mode according to a predetermined threshold to achieve a specified ripple current of said load” as recited in independent claim 1. Claims 2, 3, 7-10, and 17-19 depend from claim 1 and set forth additional limitations of the embodiments of the claimed invention.

Independent claims 4 and 11 contain limitations similar to those contained in claim 1. Thus, by similar rationale, Applicants respectfully submit that Carobolante in view of Alfrey, and further in view of Gay does not teach or suggest an H-Bridge load driving circuit including “a controller for controlling said plurality of power switch driving circuits and said at least one current source switch, and for either selecting said PWM powering mode in which said PWM signal controls said at least two power switches or selecting said linear powering mode in which said at least one current source supplies current to said load, and for controlling a switchover point between said PWM powering mode and said linear powering mode according to a predetermined threshold to achieve a specified ripple current of said load” as recited in independent claim 4. Also, Carobolante in view of Alfrey, and further in view of Gay does not teach or suggest a differential load driving circuit including “a controller for controlling said plurality of power switches and said first current source, and for either selecting a PWM powering mode in which a PWM (pulse width modulation) signal controls at least one power switch of said plurality of power switches or selecting said

linear powering mode in which said first current source supplies current to said load, and for controlling a switchover point between said PWM powering mode and said linear powering mode according to a predetermined threshold to achieve a specified ripple current of said load” as recited in independent claim 7. Claims 5-6 depend from claim 4 and set forth additional limitations of the embodiments of the claimed invention. Claims 12-16 depend from claim 11 and set forth additional limitations of the embodiments of the claimed invention.

Consequently, Applicants respectfully submit that the embodiments of the claimed invention set forth in claims 1-8 and 10-19 are not taught or anticipated by Carobolante in view of Alfrey, and further in view of Gay. Therefore, Applicants respectfully submit that the basis for rejecting claims 1-8 and 10-19 under 35 U.S.C. §103(a) is traversed.

Claim 9

According to the Office Action, claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carobolante in view of Alfrey, further in view of Walter (US 2003/0155813). Applicants have reviewed the Carobolante, Alfrey, and Walter references, and respectfully submit that the embodiments of the claimed invention set forth in claim 9 are neither anticipated nor rendered obvious by Carobolante in view of Alfrey, further in view of Walter.

As presented above, Carobolante and Alfrey, alone or in combination, fail to teach or suggest each limitation of independent claim 1, from which claim 9 depends. Furthermore, Walter fails to teach or suggest a modification of Carobolante and Alfrey that would remedy the deficiencies of Carobolante and Alfrey.

Applicants respectfully submit that Walter, alone or in combination with Carobolante and Alfrey, do not teach or suggest a differential load driving circuit including “a controller for controlling said plurality of power switch driving circuits and said at least one current source switch, and for either selecting said PWM powering mode in which said PWM signal controls said at least one power switch or selecting said linear powering mode in which said first current source supplies current to said load, and for controlling a switchover point between said PWM powering mode and said linear powering mode according to a predetermined threshold to achieve a specified ripple current of said load” as recited in independent claim 1.

Consequently, Applicants respectfully submit that the embodiments of the claimed invention set forth in claim 9 are not taught or anticipated by Carobolante in view of Alfrey, further in view of Walter. Therefore, Applicants respectfully submit that the basis for rejecting claim 9 under 35 U.S.C. §103(a) is traversed.

Conclusions

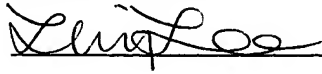
In view of the foregoing amendments and remarks, Applicants respectfully submit that the pending claims are in condition for allowance. Applicants respectfully request reconsideration of the application and allowance of the pending claims.

If the Examiner determines the prompt allowance of these claims could be facilitated by a telephone conference, the Examiner is invited to contact the undersigned at 408-987-5920.

Please direct correspondence to the address given below.

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Respectfully submitted,

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